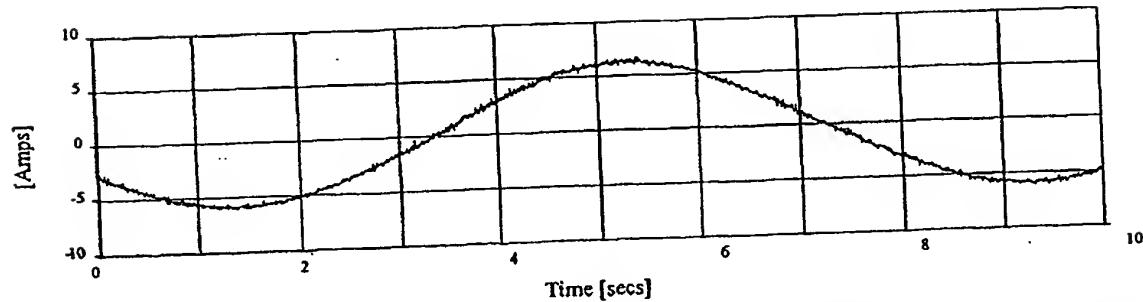


Figure 1: The Matrix Converter Circuit and Controller

Figure 2A. An Output Current Waveform for the Matrix Converter with an Induction Motor Load  
Switching Frequency = 4kHz, Motor Shaft Speed = 3rpm

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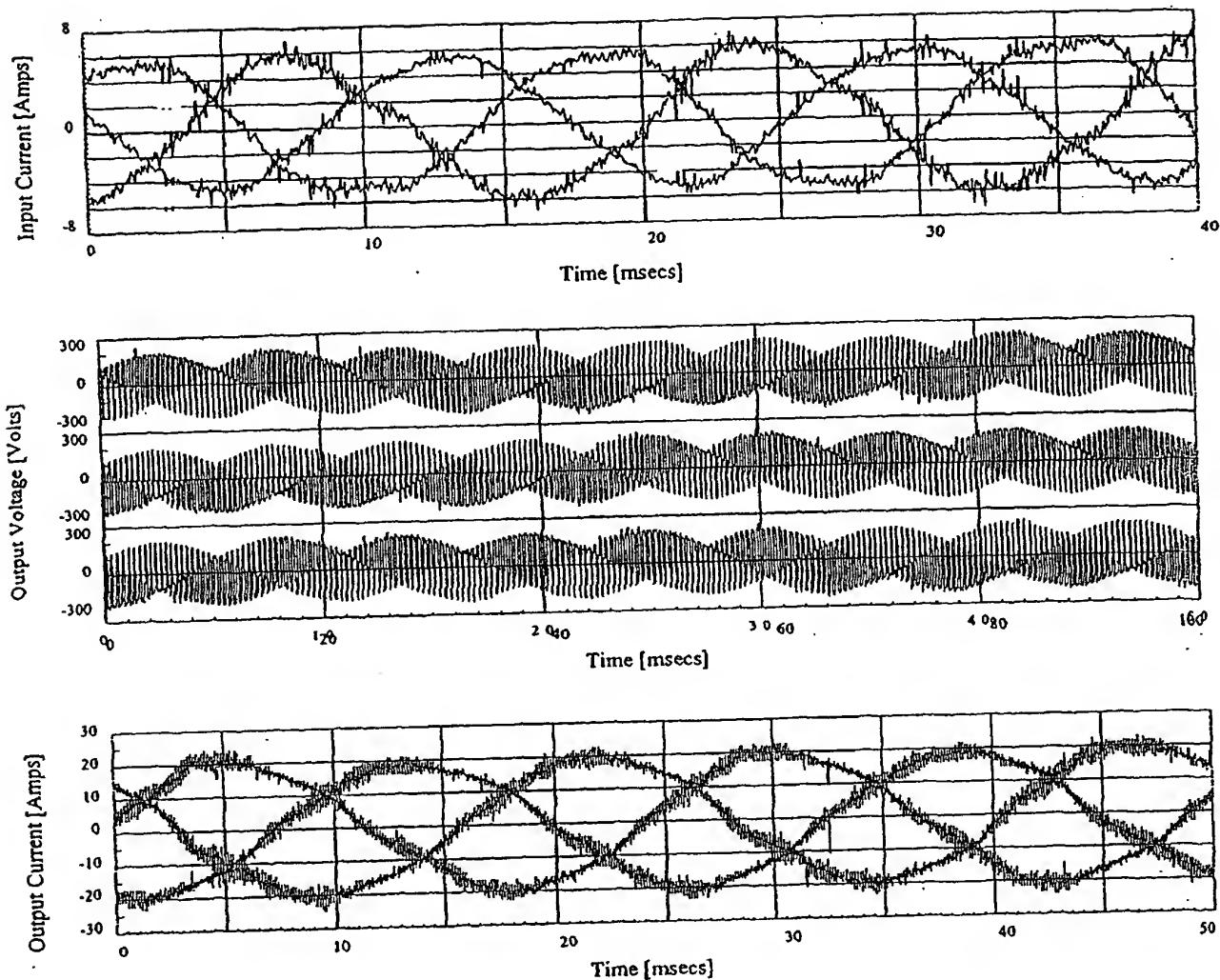


Figure 2B Input Current, Output Voltage and Output Current Waveforms  
for the Matrix Converter with an Induction Motor Load  
Switching Frequency = 4kHz, Input Frequency = 60Hz, Output frequency = 40Hz

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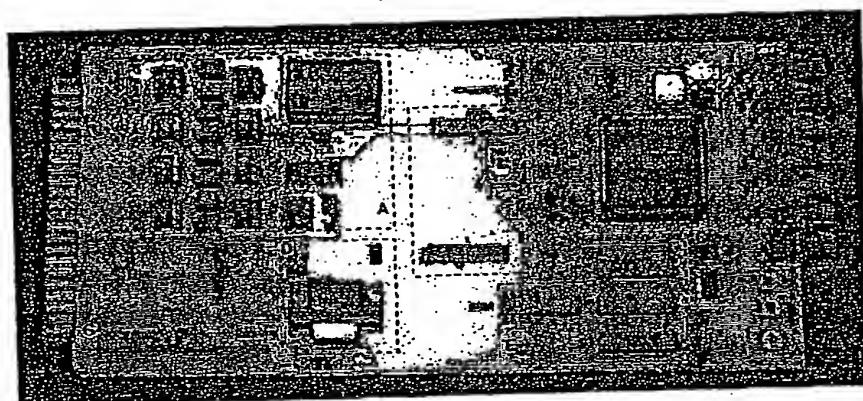


Figure 3 Photograph of the controller card

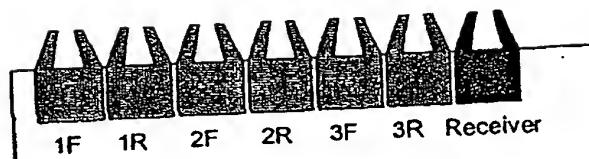
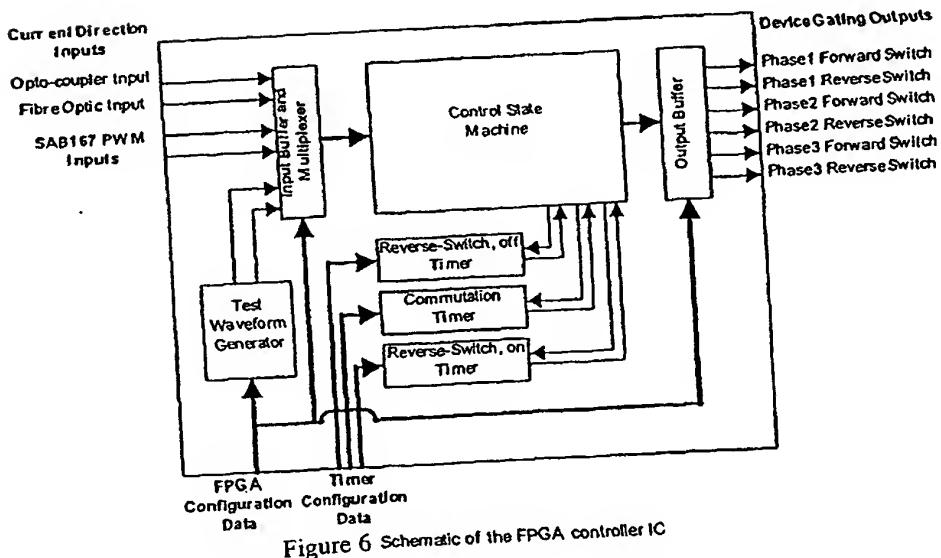
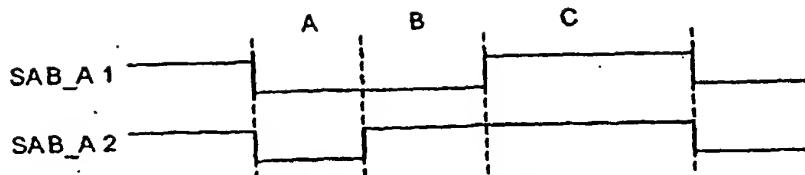


Figure 4A



Figure 4B

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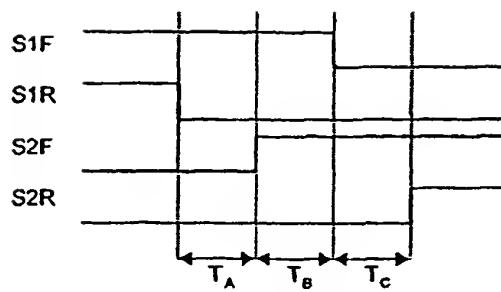


Figure 7

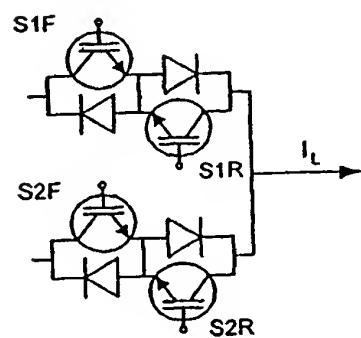


Figure 8

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